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Critique of the AVERT trial

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The AVERT trial is the largest randomized multicenter trial conducted in stroke rehabilitation to date. It compares very early mobilization (<24 hours after symptom onset) with usual care in ischemic and hemorrhagic stroke patients without significant co-existing comorbidity or premorbid disability. The authors are to be complimented to have achieved this high-quality collection of data across five countries in three continents (Australia/New Zealand, Europe, Asia). Rehabilitation interventions are difficult to test in multicenter trials because they often lack standardization and involve a great deal of human effort on the side of the therapist and patient as well. This complexity is even higher in the acute phase after stroke where time is short for meeting all the requirements of acute care, i.e., treating the acute event, finding its cause and preventing complications. The AVERT investigators invested substantial effort to ensure comparability of the intervention across the centers and meeting pre-established criteria for intervention quality. The trial is pragmatic in the sense that the early mobilization protocol selected was simple and relatively inexpensive, hence, had the potential for a quick adoption outside of the trial. In addition it was well supported by preliminary data of a phase 2 trial.

The results are unexpected – as the authors admit – and lead to rejection of their hypothesis of a superiority of very early mobilization over usual care. Even worse, the findings suggest that early rehabilitation may be worse than usual care fueling the old debate about early activity increasing brain injury .